SUBJECT INDEX

Accelerometers

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Active control

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Aggregates

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Aging

Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Algorithms

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Aluminum

Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Amplification

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Analysis

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Anchorages

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Approximation

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Arches

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Automation

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Axial compression

Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Axial loads

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Axisymmetry

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Bars

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Base isolation

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Beam columns

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Beams

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Bearing capacity

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Bending

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Bending moments

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Biaxial bending

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Biaxial stress

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Blast loads

Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Bolts

3D Simulation of EndPlate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Bonding

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Bonding strength

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Boundary element method

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Box girders

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Bracing

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Brick masonry

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Bridge abutments

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

Bridge decks

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Bridge design

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Bridge failure

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Bridge inspection

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Bridge tests

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Bridges

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485.

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Bridges, box girder

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Bridges, cable-stayed

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

Bridges, composite

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Bridges, concrete

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Bridges, continuous

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Bridges, girder

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Bridges, highway

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Bridges, long span

Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526.

Bridges, steel

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Bridges, suspension

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Bridges, wooden

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Brittle failure

Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

Buckling

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Load-Eccentricity Effects on Cold-Formed–Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

Building codes

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K. Chopra, ST Feb. 94, p597-616.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, p3418-3434.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Building design

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Improved Wide-Column-Frame Analogy for Shear-Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Building frames

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Buildings

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Cables

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Calibration

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Cantilevers

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Cellular structures

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Channel design

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

Climatic data

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Closed form solutions

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Codes

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Cold-formed steel

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Collapse

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Collapse load

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Columns

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Columns, supports

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Composite beams

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Composite columns

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Composite materials

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Composite structures

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Compression

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Computer analysis

Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Computer applications

3D Simulation of EndPlate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Computer models

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Computer programs

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Computer software

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Computerized design

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Concentrated loads

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Concrete

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Concrete blocks

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Concrete construction

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshenas, ST May 94, p1543-1562.

Concrete deterioration

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Concrete placing

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Concrete, prestressed

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Concrete, reinforced

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-1509.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

iSDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122.

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Concrete slabs

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1693-1702.

Concrete structures

Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Jolko Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Configuration

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Confinement

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Connections

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Connections, joints

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Constitutive relations

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Construction methods

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Contact pressure

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Continuous structures

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Contraction

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Control

Semiactive Motion Control Using Variable Stiffness, David C. Nemir, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Cooling towers

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Wacil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Corbels

Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Core

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Corrosion

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Corrugated plates

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Cost savings

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Coupled systems
Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Covariance
Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Crack propagation
Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.

Cracking
Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Cracks
Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Creep
Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Mårtensson, ST Sept. 94, p2565-2582.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Cross sections
Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Culverts
Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Curvature
Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Curved beams
Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Cyclic loads
Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Experimental Study of Thin Steel–Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Cyclic tests
Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Cylindrical shells

Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Damage

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Damage accumulation

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Damage assessment

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Damping

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Dams, arch

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Dams, concrete

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Dams, gravity

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Decision making

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Decision support systems

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Deflection

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Mårtensson, ST Sept. 94, p2565-2582.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Deformation

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Degrees of freedom

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Delaminating

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Design

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, p3418-3434.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Simplified Strength Prediction for Cold-Formed *C*- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Design criteria

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Deterioration

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Diaphragms

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Differential equations

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Dilatancy

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Displacement

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Distortion

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Domes, structural

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Drift

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Ductility

Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Dynamic analysis

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Prediction of Observed Bridge Response with Soil-Pile–Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Dynamic loads

Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Dynamic response

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-3547.

Dynamic tests

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Earthquake damage

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Earthquake engineering

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Earthquake excitation

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K. Chopra, ST Feb. 94, p597-616.

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Earthquake loads

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Earthquake resistant structures

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Earthquakes

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, p3418-3434.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-3547.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Eccentric bracing

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Eccentricity

Load-Eccentricity Effects on Cold-Formed–Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Effective length

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Effective width

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Elastic analysis

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Elastic moduli

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Elastic restraints

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Elastoplasticity

Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Elevated structures

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Empirical equations

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Encasements

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Energy absorption

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Energy dissipation

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Epoxy compounds

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Epoxy resins

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Equilibrium

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

Equipment

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Equivalence

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Error analysis

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Estimation

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Evaluation

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Excitation

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Experimental data

Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

Experimentation
Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Expert systems
Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Failure load
Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Failure modes
State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Failures
Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Fatigue
Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Fatigue life
Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Fatigue strength
Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Fiber optics
Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

Fiber reinforced materials
Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Fiber reinforced plastics
Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Fiberglass
Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Field investigations
Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Field tests
Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Fills

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-1509.

Finite element method

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Finite elements

3D Simulation of EndPlate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Finite strip method
Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Fire resistance
Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.
Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-1509.
Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Fire resistant materials
Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Fire tests
Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Flexibility
Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.
Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Flexible connections
Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Flexural strength
Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.
Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.
Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Flexure
Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.
Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Floors
Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.
Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485.

Flutter
Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526.

Force
Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Forensic engineering
Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Formwork, construction
Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.
Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Fracture mechanics
Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.
Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.
Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.
Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.
Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Fractures
Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Fracturing
Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

Framed structures
Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.
Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.
Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.
Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.
Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Frames

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Frequency

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Frequency response

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Full-scale tests

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Fuzzy sets

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Geometric nonlinearity

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

Girders

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Glass

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Glass plates

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Gluing

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Graphite fibers

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Grid systems

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Grillages

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Ground cover

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Ground motion

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Grouting

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Guardrails
Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Gusset plates
Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Gypsum
Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Hardness
Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Heat treatment
Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

High strength concretes
Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

High strength steel
Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Hollow sections
Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-1509.

Humidity
Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Mårtensson, ST Sept. 94, p2565-2582.

Hydrodynamic pressure
Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505.

Hydrostatic pressure
Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Hysteresis
Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Hysteresis models
Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

I beams
Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Identification
Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Impact loads
Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Impact tests
Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Inelastic action
Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Inspection
Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Interactions
Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Interfaces
Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Internal pressure
Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Isolators
Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Joints
Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Joints, bolted
Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Kalman filter
Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Laboratory tests
Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Laminates

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Laminating

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Lateral displacement effect

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

Lateral forces

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

Lateral loads

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Lateral pressure

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Lattice design

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Layered systems

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Least squares method

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Life cycles

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Limit design method

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Limit states

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Liquids

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-3547.

Live loads

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshenas, ST May 94, p1543-1562.

Load combinations

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

Load distribution

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Load duration

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Mårtensson, ST Sept. 94, p2565-2582.

Load factors

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Load resistance

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Load tests

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485.

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Load transfer

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Loading

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Loading history

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Loads

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Maintenance

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Mapping

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Masonry

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Mass

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Materials testing

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Mathematical models

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Mathematics

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Matrix methods

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Membranes

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Metals

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Modal analysis

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Model verification

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Modeling

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Models

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Modular structures

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Modulus of elasticity

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Mohr-Coulomb theory

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Moisture content

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Moments

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Monte Carlo method

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Mortars

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Motion

Semiactive Motion Control Using Variable Stiffness, David C. Nemir, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Motion effects

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Multistory buildings

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Nails

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Natural frequency

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

New York City

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Nomographs

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Nondestructive tests

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Nonlinear analysis

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957.

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Nonlinear programming

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Nonlinear response

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Nonlinear systems

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Nonproportional loading

Nonlinear Analysis of Space Trusses, Erling Martha-Smith, ST Sept. 94, p2717-2736.

Numerical analysis

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Numerical models

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Object-oriented languages

Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Offshore platforms

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Offshore structures

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122.

Optimal control methods

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Optimal design

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Optimization

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Orthotropic plate

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Panels

Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Parameters

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Pedestrians

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Performance evaluation

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Pile foundations

Prediction of Observed Bridge Response with Soil-Pile–Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Pile groups

Prediction of Observed Bridge Response with Soil-Pile–Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Plastic hinges

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-2175.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Plastic theory

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Plasticity

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-2175.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Plates

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Poisson ratio

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Poles

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Polynomials

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

Post tensioning

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Postbuckling behavior

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Pressures

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Prestressing

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Pretensioning

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Probabilistic methods
Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Probability
Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Probability distribution
Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshenas, ST May 94, p1543-1562.

Probability theory
Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Professional practice
Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Progressive failure
Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Pseudodynamic method
Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Pull-out resistance
Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Random processes
Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Random vibration
Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Ratings
Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Records management
Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K. Chopra, ST Feb. 94, p597-616.

Regression analysis
Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Rehabilitation
Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Reinforcement
Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Reinforcing steels
Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Reliability
Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122.

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Reliability analysis

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Repairing

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Resistance

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Resistance factors

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Response spectra

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Retrofitting

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Rigid frames

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-2175.

Rigid-body dynamics

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Risk management

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Roof span

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Roofs

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Safety

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122.

Safety analysis

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Safety factors

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Sandwich panels

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Seismic analysis

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Seismic design

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Seismic effects

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Seismic hazard

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Seismic response

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Experimental Study of Thin Steel–Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, p3418-3434.

Prediction of Observed Bridge Response with Soil-Pile–Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Safak and Arthur Frankel, ST Oct. 94, p2820-2839.

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Seismic tests

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Semi-rigid connections

3D Simulation of EndPlate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-2175.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Sensors

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

Service loads

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Serviceability

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Shake table tests

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Shear

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K. Chopra, ST Feb. 94, p597-616.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Shear deformation

Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Shear failure

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Shear flow

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Shear forces

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Shear lag

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Shear strength

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Shear stress

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Behavior of Reinforced High-Strength–Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Shear tests

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Shear walls

Experimental Study of Thin Steel–Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Shell structures

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Shrinkage

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Signal processing

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Silos

Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Simulation

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Simulation of Blast Pressures on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Safak and Arthur Frankel, ST Oct. 94, p2820-2839.

Size effect

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

Skew bridges

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Slabs

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshenas, ST May 94, p1543-1562.

Slenderness ratio

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Slip

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Slipping

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Snow depth

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Snow loads

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Softening

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Soil-structure interaction

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Prediction of Observed Bridge Response with Soil-Pile–Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Space truss

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Specifications

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Splicing

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Splitting

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Springs, elastic

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Stability

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-2175.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Stability analysis

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Standards

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

State-of-the-art reviews

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Static loads

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Static structural analysis

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Statistical analysis

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Steel

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Steel beams

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Steel columns

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-1509.

Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Steel fibers

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Steel frames

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Steel plates

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Experimental Study of Thin Steel–Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Steel structures

3D Simulation of EndPlate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Stiffness

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-22.

Semiactive Motion Control Using Variable Stiffness, David C. Nemir, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Stiffness matrix

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Stochastic models

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Stochastic processes

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Storage tanks

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-3547.

Strain

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Strain distribution

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Strain energy

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Strain rate

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Strain softening

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Strength

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Stress

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Stress strain relations

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Stress-strain curves

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Structural analysis

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Structural behavior

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Structural design

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122.

Structural dynamics

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Structural elements

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Structural materials

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Structural members

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Structural reliability

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Structural response

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Structural safety

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Structural stability

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Semiactive Motion Control Using Variable Stiffness, David C. Nemir, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Studs

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Substructures

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Superstructures

Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Surface roughness

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Surveys, data collection

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshenas, ST May 94, p1543-1562.

System analysis

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485.

System reliability

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Systems

Story-Drift Shear and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Systems engineering

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Tall buildings

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Tanks

Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Taper

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Temperature

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Temperature effects

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Tendons

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Tensile strain

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Tensile strength

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Tensile stress

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.

Tension

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Testing

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Tests

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-2836.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997.

Thermal stresses

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Thin shell structures

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Thin wall sections

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Thin wall structures

Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Three-dimensional analysis

3D Simulation of EndPlate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Three-dimensional models

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Tied concrete columns

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

Timber construction

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Mårtensson, ST Sept. 94, p2565-2582.

Timbers

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Mårtensson, ST Sept. 94, p2565-2582.

Time dependence

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Torsion

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K. Chopra, ST Feb. 94, p597-616.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, p3418-3434.

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Torsional vibration

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Toughness

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

Traffic volume

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Transmission lines

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Transverse shear

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Trends

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Trucks

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Trusses

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Tube joints

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

Tubes

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Tuned mass dampers

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Two-dimensional models

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Ultimate loads

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Ultimate strength

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Ultrasonic testing

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Uplift

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-3547.

Uplift pressure

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Utility theory

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Vehicle impact forces

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Vehicular traffic

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Vertical loads

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Vibration

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Semiactive Motion Control Using Variable Stiffness, David C. Nemir, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Vibration analysis

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

Vibration measurement

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Vibration tests

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Viscoelasticity

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Walls

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.

Water depth

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Water tanks

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Wave propagation

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Webs

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Weight

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Welds

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Wind forces

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Wind loads

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

Wind pressure

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Wind tunnel test

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Wind velocity

Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526.

Window glass

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Wire products

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Wire rope

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Wood

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Wood beams

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Wooden structures

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Yield

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Yield line method

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Yield surface

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

AUTHOR INDEX

Abendroth, Robert E.
Deformations in Composite Prestressed Concrete Bridge Deck Panels, ST Nov. 94, p3223-3242

AbouHashish, Amr Ahmed
see Durrani, Ahmad J., ST Mar. 94, p947-964

Adebar, Perry
Influence of Membrane Forces on Transverse-Shear Reinforcement Design, with Weishi He, ST Apr. 94, p1347-1366
Predicting Strength Variability of Concrete Offshore Structures, with Ricardo Foschi and Felix Yao, ST July 94, p2108-2122

Aflak, Waeil
see Jullien, Jean-François, ST May 94, p1471-1488

Agar, T. J. A.
see Chen, Z. Q., (disc), ST June 92, p1509-1526

Agbayani, N.
Novel Design Algorithms for *K* Factor Calculation and Beam-Column Selection, with P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648
err: ST May 94, p1683

Aguilar, J. Cipriano
see Ruiz, Sonia E., ST June 94, p1850-1865

Akhras, Georges
see Cheung, M. S., ST Mar. 94, p716-727

Aktan, A. E.
see Miller, R. A., ST July 94, p2176-2198
see Shahrooz, B. M., ST Feb. 94, p422-440

Aktan, A. Emin
see Huria, Vikas, ST Jan. 93, p88-107

Aktan, Ahmet E.
see Hosahalli, Somaprasad R., ST Feb. 94, p339-359
see Huria, Vikas, ST Oct. 94, p3056-3062

Al-Bermani, F. G. A.
see Kitipornchai, S., ST Aug. 94, p2281-2287

Al-Bermani, Faris G. A.
see Chin, Chee-Kiong, ST Apr. 93, p1048-1068

Albrecht, Pedro
see Namini, Ahmad, ST June 92, p1509-1526
see Tiedeman, Jane L., ST Apr. 93, p1234-1250

Al-Harthy, Ali S.
Reliability Assessment of Prestressed Concrete Beams, with Dan M. Frangopol, ST Jan. 94, p180-199
Reliability-Based Design of Prestressed Concrete Beams, with Dan M. Frangopol, ST Nov. 94, p3156-3177

Al-Mutairi, Naji
see Ayyub, Bilal M., ST Aug. 94, p2520-2531
see Ayyub, Bilal M., ST Aug. 94, p2532-2546

Al-Mutairi, Naji A.
see Ayyub, Bilal M., ST June 94, p1866-1881
see Ayyub, Bilal M., ST June 94, p1882-1892

Altın, Sinan
see Sucuoğlu, Haluk, ST Mar. 94, p765-782

Alwis, W. A. M.
Long-Term Deflection of RC Beams, with A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226

Anand, Subhash C.
Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, with M. Ayubur Rahman, ST Mar. 94, p998-1015
see Rahman, M. Ayubur, ST Aug. 94, p2408-2422

Anderheggen, E.
Reinforced-Concrete Dimensioning Based on Element Nodal Forces, with Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731

Ang, K. K.
see Alwis, W. A. M., ST July 94, p2220-2226
see Wang, C. M., ST Jan. 94, p200-211

Ansah, Alexander Michael
Analysis of Arch Dams, ST May 93, p1516-1538
err: ST Aug. 94, p2563-2564

Aparicio, Angel C.
see Casas, Juan R., ST Aug. 94, p2437-2450

Aristizabal-Ochoa, J. Dario
K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, ST Apr. 94, p1272-1290
Slenderness K factor for Leaning Columns, ST Oct. 94, p2977-2991
Stability of Columns under Uniform Axial Load with Semirigid Connections, ST Nov. 94, p3212-3222

Aruna, V.
see Mau, S. T., ST Nov. 94, p3366-3385

Arwashan, Naji
disc. (of Reliability Analysis of Creep and Shrinkage Effects, by C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337), ST Mar. 94, p1050
disc. (of Ultimate Load Test of Slab-on-Girder Bridge, by Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624), ST Feb. 94, p670-671

ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete
Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ST Aug. 94, p2330-2357

Astaneh-Asl, Abolhassan
see De Stefano, Mario, ST Jan. 94, p212-229

Aswad, Alex
disc. (of Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, by Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250), ST June 94, p1938-1939

Attalla, Mourad R.
Spread of Plasticity—Quasi-Plastic-Hinge Approach, with Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473

Aydın, Ruhi
Lateral Stiffness of Frames and Effective Length of Framed Columns, with Hasan Gönen, ST May 94, p1455-1470

Ayoub, Haitham
Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, with Saeed Karshenas, ST May 94, p1543-1562
see Karshenas, Saeed, ST May 94, p1525-1542

Ayyub, Bilal M.
Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, with Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531
Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, with Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546
Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, with Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881
Welded Wire Fabric for Bridges II. : Fatigue Strength, with Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892

Aziz, Tarek
see Ghobarah, A., ST Sept. 94, p2697-2716

Azizinamini, A.
Old Concrete Slab Bridges. I: Experimental Investigation, with T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304
Old Concrete Slab Bridges. II: Analysis, with Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319

Babu, S. Sai
see Rao, A. S. Prasada, ST Sept. 94, p2784-2792

Badoni, D.
see Makris, N., ST Oct. 94, p2992-3011

Bahaari, Mohammed R.
see Sherbourne, Archibald N., ST Nov. 94, p3122-3136

Bakht, Baidar
Ultimate Load Test of Slab-on-Girder Bridge, with Leslie G. Jaeger, ST June 92, p1608-1624 disc: Naji Arwashan, ST Feb. 94, p670-671
see Mufti, Aftab A., ST June 93, p1761-1777

Balaguru, P.
see Yong, Yook-Kong, ST Apr. 94, p1182-1201

Banan, M. R.
Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, with M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283
Parameter Estimation of Structures from Static Response. I: Computational Aspects, with M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258
see Banan, M. R., ST Nov. 94, p3259-3283

Banon, H.
Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, with R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612
Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, ST Dec. 94, p3613-3633

Barnhill, G.
see Azizinamini, A., ST Nov. 94, p3284-3304
see Azizinamini, A., ST Nov. 94, p3305-3319

Barzegar, Fariborz
Generating Reinforcement in FE Modeling of Concrete Structures, with Srinivas Maddipudi, ST May 94, p1656-1662

Bažant, Zdeněk P.
Fracture Size Effect: Review of Evidence for Concrete Structures, with Jośko Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398
disc. (of Creep Effects in Composite Beams with Flexible Shear Connectors, by Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081), ST Feb. 94, p674-675
disc. (of Fracture Mechanics and Size Effect of Concrete in Tension, by Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185), ST Aug. 94, p2555-2558
see Kazemi, Mohammad T., (disc), ST Nov. 92, p3169-3185

Bazzurro, Paolo
Seismic Hazard Analysis of Nonlinear Structures. II: Applications, with C. Allin Cornell, ST Nov. 94, p3345-3365
Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, with C. Allin Cornell, ST Nov. 94, p3320-3344

Bea, R. G.
see Banon, H., ST Dec. 94, p3595-3612

Beason, W. Lynn
disc. (of Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, by H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901), ST Oct. 94, p3075-3077

Bedair, O. K.
disc. (of Effective Width of Locally Buckled Plates in Compression and Bending, by Tsutomu Usami, ST May 93, p1358-1373) with A. N. Sherbourne, ST Oct. 94, p3088-3091

Béguin, Gilbert H.
disc. (of Reinforced Concrete Beams with Plates Glued to Their Soffits, by Deric John Oehlers, ST Aug. 92, p2023-2038), ST Apr. 94, p1368-1369

Beidleman, Carl R.
see Veshosky, David, ST July 94, p2123-2136

Bernal, Dionisio
Viscous Damping in Inelastic Structural Response, ST Apr. 94, p1240-1254

Bernander, Stig
see Emborg, Mats, ST Oct. 94, p2893-2912

Bez, Rolf
see Moses, Fred, ST June 94, p1745-1762

Bhattacharjee, Sudip S.
Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, with Pierre Léger, ST Apr. 94, p1255-1271

Billington, David P.
see Matteo, John, ST Nov. 94, p3197-3211

Biswas, Mrinmay
see Samman, Mahmod M., ST Jan. 94, p269-289
see Samman, Mahmod M., ST Jan. 94, p290-306

Blaauwendraad, J.
see Shahrooz, B. M., ST Feb. 94, p422-440

Blasi, Carlo
Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, with Paolo Foraboschi, ST Aug. 94, p2288-2309

Bonacci, John F.
Bar Yield Penetration in Monotonically Loaded Anchorages, ST Mar. 94, p965-986
Tests of Yielding Anchorages Under Monotonic Loadings, with Jorge Marquez, ST Mar. 94, p987-997

Boonyapinyo, Virote
Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, with Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506

Boothby, T. E.
see Azizinamini, A., ST Nov. 94, p3284-3304
see Azizinamini, A., ST Nov. 94, p3305-3319

Bosch, Harold
see Namini, Ahmad, ST June 92, p1509-1526

Bove, Paul M.
see Norville, H. Scott, ST Mar. 93, p891-901

Bradford, Mark Andrew
disc. (of Creep in Composite Continuous Beams. II: Parametric Study, by Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133), ST Oct. 94, p3096-3097
see Ronagh, Hamid Reza, ST Nov. 94, p3137-3155

Breen, Florence L., Jr.
see Zhao, Zhengwei, ST May 94, p1608-1623
see Zhao, Zhengwei, ST May 94, p1624-1642

Brown, Colin
see Castaneda, Duane, ST Dec. 94, p3506-3524

Brown, John Webster
disc. (of Roof-Snow Load for Seismic-Design Calculations, by Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350), ST Jan. 94, p309-312

Bruen, F. J.
see Banon, H., ST Dec. 94, p3595-3612

Bruneau, Michel
Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, with David Walker, ST Sept. 94, p2637-2652
State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, ST Jan. 94, p230-251

Buetow, Gerald W.
see Veshosky, David, ST July 94, p2123-2136

Burnet, Matthew J.
see Oehlers, Deric J., ST Feb. 94, p378-393

Caccese, V.
see Elgaaly, M., ST Feb. 93, p588-605

Caccese, Vincent
Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, with Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587
disc: Geoffrey L. Kulak, D. J. Laurie Kennedy and Robert Driver, ST Oct. 94, p3072-3073
clo: ST Oct. 94, p3074

Calixto, Jose M.
see Wheat, Dan L., ST June 94, p1909-1929

Casas, Juan R.
Structural Damage Identification from Dynamic-Test Data, with Angel C. Aparicio, ST Aug. 94, p2437-2450

Castaneda, Duane
Methodology for Forensic Investigations of Seismic Damage, with Colin Brown, ST Dec. 94, p3506-3524

Cayes, Lloyd R.
see Tiedeman, Jane L., ST Apr. 93, p1234-1250

Chai, Y.H.
Analytical Model for Steel-Jacketed RC Circular Bridge Columns, with M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376

Chakrabarty, B. K.
Model for Optimal Design of Reinforced Concrete Beam, ST Nov. 92, p3238-3242
disc: W. M. Jenkins, ST Mar. 94, p1046-1047
clo: ST Mar. 94, p1047-1048

Chan, H. C.
Heterogeneous Hardening Plasticity Model for Concrete, with Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62

Chan, S. L.
see Yau, C. Y., ST Oct. 94, p2803-2819

Chan, Siu Lai
Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, with Goman Wai Ming Ho, ST Apr. 94, p1075-1087
Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, with Zhi Hua Zhou, ST June 94, p1703-1717

Chandler, Adrian M.
Period-Dependent Effects in Seismic Torsional Response of Code Systems, with Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, p3418-3434

Chang, C. C.
Instantaneous Optimal Control of Building Frames, with Henry T. Y. Yang, ST Apr. 94, p1307-1326
Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, with J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160

Chang, Dongil
Impact Factors for Simple-Span Highway Girder Bridges, with Heehyun Lee, ST Mar. 94, p704-715

Chang, Peter
see Ayyub, Bilal M., ST Aug. 94, p2520-2531
see Ayyub, Bilal M., ST Aug. 94, p2532-2546

Chang, Peter C.
see Ayyub, Bilal M., ST June 94, p1866-1881
see Ayyub, Bilal M., ST June 94, p1882-1892

Chang, Shih Toh
Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, ST Nov. 92, p3113-3121
err: ST Sept. 93, p2812
disc: S. V. Narasimham, ST May 94, p1681
clo: ST May 94, p1681-1682

Charland, James W.
Cable Systems with Elastic Supporting Elements, with Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665

Chatterjee, P. K.
Vibration of Suspension Bridges Under Vehicular Movement, with T. K. Datta and C. S. Surana, ST Mar. 94, p681-703

Chen, Benxian
Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, with M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470

Chen, Ruobo
see Caccese, Vincent, ST Feb. 93, p573-587

Chen, W. F.
see Duan, L., ST Mar. 93, p809-830
see King, W. S., ST July 94, p2156-2175
see Liew, J. Y. Richard, ST May 94, p1434-1454

Chen, Z. Q.
disc. (of Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, by Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526) with T. J. A. Agar, ST Mar. 94, p1044-1045

Cheng, F. Y.
see Chang, C. C., ST Jan. 94, p139-160

Cheng, J. J. Roger
Elastic Buckling Strength of Gusset Plate Connections, with Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559

Cheung, M. S.
Combined Boundary Element / Finite Strip Analysis of Bridges, with Georges Akhras and W. Li, ST Mar. 94, p716-727

Cheung, Y. K.
see Chan, H. C., ST Jan. 94, p46-62

Chin, Chee-Kiong
Finite Element Method for Buckling Analysis of Plate Structures, with Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068
disc: C. M. Menken, ST Oct. 94, p3093-3095
clo: ST Oct. 94, p3095-3096

Chopra, Anil K.
see De la Llera, Juan Carlos, ST Feb. 94, p597-616
see Goel, Rakesh K., ST Jan. 94, p161-179

Chowdhury, Mostafiz R.
disc. (of Nonlinear Finite Element Analysis of RC Slab Bridge, by Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107), ST Oct. 94, p3077-3078
disc. (of Nonlinear Finite-Element Model for Light-Frame Stud Walls, by B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135), ST May 94, p1678-1679

Çıtıpıtıoğlu, Ergin
see Sucuoğlu, Haluk, ST Mar. 94, p765-782

Cohen, Julie Mark
disc. (of Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, by R. A. LaBoube, ST June 93, p1733-1739), ST Oct. 94, p3099-3102

Cohn, M. Z.
Application of Structural Optimization, with A. S. Dinovitzer, ST Feb. 94, p617-650
Optimal Design of Structural Concrete Bridge Systems, with Z. Lounis, ST Sept. 94, p2653-2674

Collins, M. P.
see Vecchio, F. J., ST Dec. 93, p3590-3610

Conte, J. P.
see Luo, Y. H., ST July 94, p2137-2155

Cooke, N.
see Restrepo-Posada, J. I., ST Nov. 94, p3178-3196

Cornell, C. A.
see Banon, H., ST Dec. 94, p3595-3612

Cornell, C. Allin
see Bazzurro, Paolo, ST Nov. 94, p3320-3344
see Bazzurro, Paolo, ST Nov. 94, p3345-3365

Correnza, Joseph C.
see Chandler, Adrian M., ST Dec. 94, p3418-3434

Cortinez, Victor H.
disc. (of Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, by Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249), ST Feb. 94, p676-678

Cusson, Daniel
High-Strength Concrete Columns Confined by Rectangular Ties, with Patrick Paultre, ST Mar. 94, p783-804

Das, Y. C.
see Vallabhan, C. V. Girija, ST May 94, p1663-1671

Datta, T. K.
see Chatterjee, P. K., ST Mar. 94, p681-703
see Jangid, R. S., ST Jan. 94, p1-22

de Borst, R.
see Shahrooz, B. M., ST Feb. 94, p422-440

de Buen, Oscar
Column Design in Steel Frames under Gravity Loads, ST Oct. 92, p2928-2935
disc: Joseph A. Yura, ST Mar. 94, p1051-1052

De la Llera, Juan Carlos
Evaluation of Code Accidental-Torsion Provisions from Building Records, with Anil K. Chopra, ST Feb. 94, p597-616

De Luca, Antonello
see De Stefano, Mario, ST Jan. 94, p212-229

De Stefano, Mario
Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, with Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229

Dean, Donald L.
Torsion of Regular Multicellular Members, ST Dec. 94, p3675-3678

Deierlein, Gregory G.
see Attalla, Mourad R., ST Aug. 94, p2451-2473

Delis, E.
see Makris, N., ST Oct. 94, p2992-3011

Demir, Muge
see Veshosky, David, ST July 94, p2123-2136

Deodatis, George
see Matteo, John, ST Nov. 94, p3197-3211

Deschapelles, Bernardo
disc. (of Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, by A. K. H. Kwan, ST Feb. 93, p420-437), ST June 94, p1934-1937

Despot, Z.
see Anderheggen, E., ST June 94, p1718-1731

Dewey, Raymond R.
Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, with Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044

Dezi, Luigino
Creep in Composite Continuous Beams. II: Parametric Study, with Angelo Marcello Tarantino, ST July 93, p2112-2133
disc: Mark Andrew Bradford, ST Oct. 94, p3096-3097
clo: ST Oct. 94, p3097-3098
Simplified Creep Analysis of Composite Beams with Flexible Connectors, with Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497
disc: Franco Mola, ST Oct. 94, p3083-3084
clo: ST Oct. 94, p3084-3085
see Tarantino, Angelo Marcello, ST Aug. 92, p2063-2081

Dhanasekar, Manicka
disc. (of Stress-Strain Curves for Brick Masonry in Biaxial Compression, by Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461) with Adrian Page, ST Mar. 94, p1048-1049

Dinovitzer, A. S.
see Cohn, M. Z., ST Feb. 94, p617-650

Dodd, L. L.
see Restrepo-Posada, J. I., ST Nov. 94, p3178-3196

Dorn, Thomas
see Hosser, Dietmar, ST Oct. 94, p2871-2892

Douglas, B.
see Saiidi, M., ST July 94, p2233-2241

Driver, Robert
see Kennedy, D.J. Laurie, (disc), ST Feb. 93, p588-605
see Kulak, Geoffrey L., (disc), ST Feb. 93, p573-587

Du, C.
see Elgaaly, M., ST Feb. 93, p588-605

Duan, L.
Moment-Curvature Relationships for Dented Tubular Sections, with J. T. Loh and W. F. Chen, ST Mar. 93, p809-830
disc: Loren D. Lutes and Terry L. Kohutek, ST July 94, p2255-2256
clo: ST July 94, p2256-2257

Durrani, A. J.
see Luo, Y. H., ST July 94, p2137-2155

Durrani, Ahmad J.
Earthquake Response of Flat-Slab Buildings, with S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964

Dux, Peter F.
see Muller, John F., ST Apr. 94, p1122-1139

Easterling, W. Samuel
Steel-Deck-Reinforced Concrete Diaphragms. I, with Max L. Porter, ST Feb. 94, p560-576
Steel-Deck-Reinforced Concrete Diaphragms. II, with Max L. Porter, ST Feb. 94, p577-596

Elgaaly, M.
Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, with V. Caccese and C. Du, ST Feb. 93, p588-605
disc: D.J. Laurie Kennedy, Geoffrey L. Kulak and Robert Driver, ST July 94, p2250-2251
clo: ST July 94, p2251-2255

Elgaaly, Mohamed
see Caccese, Vincent, ST Feb. 93, p573-587

El-Gamal, Mahmoud
see Siddharthan, Raj, ST Apr. 94, p1327-1346

Eligehausen, Rolf
see Bažant, Zdeněk P., ST Aug. 94, p2377-2398

Ellifritt, D. S.
see Kavanagh, K. T., ST May 94, p1599-1607

Ellingwood, Bruce R.
see Mori, Yasuhiro, ST Mar. 94, p824-845
see Mori, Yasuhiro, ST Mar. 94, p846-862
see Mouring, Sarah E., ST Feb. 94, p507-526

El-Nady, Ahmad
see Ghobarah, A., ST Sept. 94, p2697-2716

Elnashai, A. S.
see Izzuddin, B. A., ST Oct. 94, p2913-2934
see Karayannis, C. G., ST Oct. 94, p2935-2957

El-Nesr, Osama
see Hosser, Dietmar, ST Oct. 94, p2871-2892

Emborg, Mats
Assessment of Risk of Thermal Cracking in Hardening Concrete, with Stig Bernander, ST Oct. 94, p2893-2912

Espion, Bernard
disc. (of Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, by Byung Hwan Oh, ST Oct. 92, p2821-2836), ST June 94, p1932-1934

Essa, Hesham S.
Design of Cantilever Steel Beams: Refined Approach, with D. J. Laurie Kennedy, ST Sept. 94, p2623-2636

Fafitis, A.
Nonlinear Finite Element Analysis of Concrete Deep Beams, with Y. H. Won, ST Apr. 94, p1202-1220

Fattuhi, Nijad I.
Strength of FRC Corbels in Flexure, ST Feb. 94, p360-377

Feng, S.
see Saiidi, M., ST July 94, p2233-2241

Fisher, J. W.
see Sweeney, R. A. P., (disc), ST Jan. 93, p150-168

Fornaboschi, Paolo
see Blasi, Carlo, ST Aug. 94, p2288-2309

Foschi, Ricardo
see Adebar, Perry, ST July 94, p2108-2122

Frangopol, Dan M.
see Al-Harthy, Ali S., ST Jan. 94, p180-199
see Al-Harthy, Ali S., ST Nov. 94, p3156-3177

Frankel, Arthur
see Şafak, Erdal, ST Oct. 94, p2820-2839

Fridley, Kenneth J.
Estimating Ground Snow Loads Using Local Climatological Data, with Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576

Fu, C. C.
Bridge Diaphragm Elements with Partial Warping Restraint, with Yao T. Hsu, ST Nov. 94, p3388-3395

Fujii, Manabu
see Miyamoto, Ayaho, ST June 94, p1685-1702

Fung, Tat-Ching
Elastic Constants for Z-Core Sandwich Panels, with Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055

GangaRao, Hota V. S.
see Sotiropoulos, Sotiris N., ST Feb. 94, p464-485

Gardner-Morse, Mack G.
Modal Identification of Cable-Stayed Pedestrian Bridge, with Dryver R. Huston, ST Nov. 93, p3384-3404
err: ST Apr. 94, p1373

Garic, Gregory
see Russo, Edwin P., ST Nov. 92, p3243-3249

Gates, William E.
see Kunnath, Sashi K., ST Jan. 94, p120-138

Gazetas, G.
see Makris, N., ST Oct. 94, p2992-3011

Ge, Hanbin
see Usami, Tsutomu, ST July 94, p2021-2040

Ger, J. F.
see Chang, C. C., ST Jan. 94, p139-160

Gerges, Antoine
see Sen, Rajan, ST Feb. 94, p651-667

Ghali, Amin
see Kawakami, Makoto, ST Feb. 94, p527-537

Ghobarah, A.
Simplified Dynamic Analysis for Gravity Dams, with Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716

Gillum, Troy E.
see Ricles, James M., ST July 94, p2086-2107

Goel, Rakesh K.
Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, with Anil K. Chopra, ST Jan. 94, p161-179

Goel, Subhash C.
Seismic Behavior of Open-Web Truss-Moment Frames, with Ahmad M. Itani, ST June 94, p1763-1780
Seismic-Resistant Special Truss-Moment Frames, with Ahmad M. Itani, ST June 94, p1781-1797

Gönen, Hasan
see Aydın, Ruhi, ST May 94, p1455-1470

Gordaninejad, F.
see Saiidi, M., ST Oct. 94, p2958-2976

Govil, Sanjay
see Singhal, Avinash C., ST July 94, p2011-2020

Gutkowski, Richard M.
Guardrail in Posttensioned Timber-Bridge Specimen, with Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455

Hahin, C.
Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, with J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168
disc: R. A. P. Sweeney and J. W. Fisher, ST May 94, p1674-1675
clo: ST May 94, p1675-1678

Hahn, G. D.
Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, with X. Liu, ST Apr. 94, p1158-1181
err: ST Oct. 94, p3104

Haldar, Achintya
see Zhao, Zhengwei, ST May 94, p1608-1623

Haldar, Achintya
see Zhao, Zhengwei, ST May 94, p1624-1642

Hassan, Ahmed F.
see Rosowsky, David V., ST Sept. 94, p2737-2746

Hazen, Glenn A.
see Rauch, Alan F., ST May 94, p1651-1655

He, Weishi
see Adebar, Perry, ST Apr. 94, p1347-1366

Hegemier, G. A.
see Seible, F., ST Mar. 94, p903-924

Heinrich, Stephen M.
see Karshenas, Saeed, ST July 94, p2199-2217

Helba, Alaa
Collapse Loads of Continuous Skew Composite Bridges, with John B. Kennedy, ST May 94, p1395-1414
Parametric Study on Collapse Loads of Skew Composite Bridges, with John B. Kennedy, ST May 94, p1415-1433

Herwied, Alan G.
see Charland, James W., ST Dec. 94, p3649-3665

Hjelmstad, K. D.
see Banan, M. R., ST Nov. 94, p3243-3258
see Banan, M. R., ST Nov. 94, p3259-3283

Ho, Goman Wai Ming
see Chan, Siu Lai, ST Apr. 94, p1075-1087

Ho, I. K.
see Shahrooz, B. M., ST Feb. 94, p422-440

Hosahalli, Somaprasad R.
Seismic Vulnerability of Flat Slab - Core Buildings, with Ahmet E. Aktan, ST Feb. 94, p339-359

Hosser, Dietmar
Experimental and Numerical Studies of Composite Beams Exposed to Fire, with Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892

Hsu, Yao T.
see Fu, C. C., ST Nov. 94, p3388-3395

Hu, S. Z.
see Cheng, J. J. Roger, ST Feb. 94, p538-559

Huang, Dongzhou
see Wang, Ton-Lo, ST Mar. 94, p885-902

Huang, Y. P.
see Chan, H. C., ST Jan. 94, p46-62

Huris, Vikas
Different Approaches to Rating Slab Bridges, with Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062
Nonlinear Finite Element Analysis of RC Slab Bridge, with Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107
disc: Mostafiz R. Chowdhury, ST Oct. 94, p3077-3078
disc: John P. Newhook and Aftab A. Mufti, ST Oct. 94, p3078-3081
clo: ST Oct. 94, p3081-3082

Huston, Dryver R.
see Gardner-Morse, Mack G., ST Nov. 93, p3384-3404

Hutchinson, Graham L.
see Chandler, Adrian M., ST Dec. 94, p3418-3434

Ianni, Carlo
see Dezi, Luigino, ST May 93, p1484-1497

Ichinose, Toshikatsu
Experimental Verification of Beam Models for RC, with Katsuki Takiguchi, ST Aug. 94, p2261-2280

Iding, R. H.
see Shahrooz, B. M., ST Feb. 94, p422-440

Igarashi, A.
see Seible, F., ST Mar. 94, p903-924

Issa, Mohsen
Static Response of Fiberglass Pretensioned Columns, with Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648
see Sen, Rajan, ST Jan. 94, p252-268
see Sen, Rajan, ST Feb. 94, p651-667

Itani, Ahmad M.
see Goel, Subhash C., ST June 94, p1763-1780
see Goel, Subhash C., ST June 94, p1781-1797

Itani, Rafik Y.
see Kasal, Bohumil, ST Jan. 94, p100-119

Iwakuma, Tetsuo
see Kuranishi, Shigeru, ST July 94, p1977-1990

Izzuddin, B. A.
Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, with C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934
see Karayannis, C. G., ST Oct. 94, p2935-2957

Jaeger, Leslie G.
see Bakht, Baidar, ST June 92, p1608-1624
see Mufti, Aftab A., ST June 93, p1761-1777

Jain, Sudhir K.
see Sameer, Sajjad U., ST May 94, p1375-1394

James, Ray W.
see Sobanjo, J. O., ST Jan. 94, p81-99

Jangid, R. S.
Nonlinear Response of Torsionally Coupled Base Isolated Structure, with T. K. Datta, ST Jan. 94, p1-22

Jayachandran, P.
see Agbayani, N., ST Dec. 93, p3630-3648

Jayaraman, R.
see Rao, A. S. Prasada, ST Sept. 94, p2784-2792

Jenkins, W. M.
disc. (of Model for Optimal Design of Reinforced Concrete Beam, by B. K. Chakrabarty, ST Nov. 92, p3238-3242), ST Mar. 94, p1046-1047

Jullien, Jean-François
Cause of Deformed Shapes in Cooling Towers, with Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488

Kalin, Jean-Francois
see Gutkowski, Richard M., ST Dec. 94, p3435-3455

Kameshki, Esmat S.
see Syngellakis, Stavros, ST Apr. 94, p1140-1157

Karabinis, A. I.
Effects of Confinement on Concrete Columns: Plasticity Approach, with P. D. Kiousis, ST Sept. 94, p2747-2767

Karayannis, C. G.
Application of Adaptive Analysis to Reinforced Concrete Frames, with B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957
see Izzuddin, B. A., ST Oct. 94, p2913-2934

Karmakar, Vikram
see Singhal, Avinash C., ST July 94, p2011-2020

Karshenas, Saeed
Analysis of Concrete Construction Live Loads on Newly Poured Slabs, with Haitham Ayoub, ST May 94, p1525-1542
Dynamic Modeling of Slab Formwork during Concrete Placement, with Stephen M. Heinrich, ST July 94, p2199-2217
see Ayoub, Haitham, ST May 94, p1543-1562

Kasai, Kazuhiko
disc. (of Applications of Viscoelastic Dampers to High-Rise Buildings, by C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233) with Javeed A. Munshi, ST Dec. 94, p3680-3683

Kasal, B.
Nonlinear Finite-Element Model for Light-Frame Stud Walls, with R. J. Leichti, ST Nov. 92, p3122-3135

disc: Mostafiz R. Chowdhury, ST May 94, p1678-1679
clo: ST May 94, p1679-1680

Kasal, Bohumil
Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, with Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119

Kavanagh, K. T.
Design Strengths of Cold-Formed Channels in Bending and Torsion, with D. S. Ellifritt, ST May 94, p1599-1607

Kawakami, Makoto
Stress and Strain in Curved Noncracked Concrete Members, with Amin Ghali, ST Feb. 94, p527-537

Kawashima, Kazuhiko
Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, with Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031
disc: Mohammed Raoof, ST Aug. 94, p2548-2550
clo: ST Aug. 94, p2550-2554
Seismic Response Control of Bridges by Variable Dampers, with Shigeki Unjoh, ST Sept. 94, p2583-2601

Kazemi, Mohammad T.
disc. (of Fracture Mechanics and Size Effect of Concrete in Tension, by Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185) with Zdeněk P. Bažant, ST Aug. 94, p2558-2559

Kennedy, D. J. Laurie
see Essa, Hesham S., ST Sept. 94, p2623-2636
see Kulak, Geoffrey L., (disc), ST Feb. 93, p573-587

Kennedy, D.J. Laurie
disc. (of Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, by M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605) with Geoffrey L. Kulak and Robert Driver, ST July 94, p2250-2251

Kennedy, John B.
see Helba, Alaa, ST May 94, p1395-1414
see Helba, Alaa, ST May 94, p1415-1433

King, Michael William
see Miyamoto, Ayaho, ST June 94, p1685-1702

King, W. S.
Practical Second-Order Inelastic Analysis of Semirigid Frames, with W. F. Chen, ST July 94, p2156-2175

Kingsley, G. R.
see Seible, F., ST Mar. 94, p903-924
see Seible, F., ST Mar. 94, p925-946

Kiousis, P. D.
see Karabinis, A. I., ST Sept. 94, p2747-2767

Kitipornchai, S.
Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, with F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287

Kitipornchai, Sritawat
see Chin, Chee-Kiong, ST Apr. 93, p1048-1068

Kohutek, Terry L.
see Lutes, Loren D., (disc), ST Mar. 93, p809-830

Krieger, W. F.
see Banon, H., ST Dec. 94, p3595-3612

Kulak, Geoffrey L.
disc. (of Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, by Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587) with D. J. Laurie Kennedy and Robert Driver, ST Oct. 94, p3072-3073
see Kennedy, D.J. Laurie, (disc), ST Feb. 93, p588-605

Kumar, N. V. V. Phani
see Rosowsky, David V., ST Sept. 94, p2737-2746

Kumar, Ram
Numerical Modeling of Tensile Crack Propagation in Concrete Dams, with G. C. Nayak, ST Apr. 94, p1053-1074

Kunnath, Sashi K.
Seismic Damage-Control Design of Gypsum-Roof Diaphragms, with Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138

Kuo, Shyh-Rong
see Yang, Yeong-Bin, (disc), ST Aug. 92, p2039-2062

Kuranishi, Shigeru
Mechanical Behavior of Metal Contact Joint, with Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990

Kürkchübasche, A. G.
see Seible, F., ST Mar. 94, p925-946

Kurobane, Yoshiaki
see Paul, Joop C., ST Oct. 94, p2853-2870

Kwan, A. K. H.
Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, ST Feb. 93, p420-437
disc: Bernardo Deschapelles, ST June 94, p1934-1937
clo: ST June 94, p1937-1938
Simple Method for Approximate Analysis of Framed Tube Structures, ST Apr. 94, p1221-1239

Kwok, K. C. S.
see Xu, Y. L., ST Mar. 94, p747-764

LaBoube, R. A.
Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, ST June 93, p1733-1739
err: ST Dec. 93, p3688
disc: Julie Mark Cohen, ST Oct. 94, p3099-3102
clo: ST Oct. 94, p3102-3103

Lamport, William
see Ricles, James M., ST July 94, p2086-2107

Larson, Debra
see Singhal, Avinash C., ST July 94, p2011-2020

Lawrence, Stacey L.
see Norville, H. Scott, ST Mar. 93, p891-901

Lebet, Jean Paul
see Moses, Fred, ST June 94, p1745-1762

Lebet, Jean-Paul
see Wium, Jan A., ST Mar. 94, p728-746

Lee, H. H.
see Tsai, C. S., ST Apr. 93, p1222-1233

Lee, Heehyun
see Chang, Dongil, ST Mar. 94, p704-715

Lee, Kuo-Liang
see Huria, Vikas, ST Jan. 93, p88-107
see Huria, Vikas, ST Oct. 94, p3056-3062

Léger, Pierre
see Bhattacharjee, Sudip S., ST Apr. 94, p1255-1271

Leichti, R. J.
see Kasal, B., ST Nov. 92, p3122-3135

Leichti, Robert J.
see Kasal, Bohumil, ST Jan. 94, p100-119

L'Huby, Yvan
see Jullien, Jean-François, ST May 94, p1471-1488

Li, C. Q.
Reliability Analysis of Creep and Shrinkage Effects, with R. E. Melchers, ST Sept. 92, p2323-2337
disc: Naji Arwashan, ST Mar. 94, p1050
clo: ST Mar. 94, p1050

Li, W.
see Cheung, M. S., ST Mar. 94, p716-727

Li, Yi
see Durrani, Ahmad J., ST Mar. 94, p947-964

Lie, T. T.
Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, ST May 94, p1489-1509

Liew, J. Y. Richard
Notional-Load Plastic-Hinge Method for Frame Design, with D. W. White and W. F. Chen, ST May 94, p1434-1454

Lin, Yingjie
see Nemin, David C., ST Apr. 94, p1291-1306

Liu, X.
see Hahn, G. D., ST Apr. 94, p1158-1181

Loh, J. T.
see Duan, L., ST Mar. 93, p809-830

Lok, Tat-Seng
see Fung, Tat-Ching, ST Oct. 94, p3046-3055

Lotfi, Hamid R.
Interface Model Applied to Fracture of Masonry Structures, with P. Benson Shing, ST Jan. 94, p63-80

Lounis, Z.
see Cohn, M. Z., ST Sept. 94, p2653-2674

Lu, Zhi-Tao
see Sun, Bao-Jun, ST Nov. 92, p2986-2995

Luo, Y. H.
Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, with A. J. Durrani and J. P. Conte, ST July 94, p2137-2155

Lutes, Loren D.
disc. (of Moment-Curvature Relationships for Dented Tubular Sections, by L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830) with Terry L. Kohutek, ST July 94, p2255-2256

Maarouf, Ahmed
see Uang, Chia-Ming, ST Aug. 94, p2423-2436

Maddipudi, Srinivas
see Barzegar, Fariborz, ST May 94, p1656-1662

Maher, M. H.
see Chen, Benxian, ST Dec. 94, p3456-3470

Makino, Yuji
see Paul, Joop C., ST Oct. 94, p2853-2870

Makris, N.
Prediction of Observed Bridge Response with Soil-Pile–Structure Interaction, with D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011

Malhotra, P. K.
Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, with A. S. Veletsos, ST Dec. 94, p3471-3488
Uplifting Analysis of Base Plates in Cylindrical Tanks, with A. S. Veletsos, ST Dec. 94, p3489-3505
Uplifting Response of Unanchored Liquid-Storage Tanks, with A. S. Veletsos, ST Dec. 94, p3525-3547

Maragakis, Emmanel A.
see Siddharthan, Raj, ST Apr. 94, p1327-1346

Mariscal, Daniel
see Issa, Mohsen, ST Dec. 94, p3634-3648

Marquez, Jorge
see Bonacci, John F., ST Mar. 94, p987-997

Mårtensson, Annika
Creep Behavior of Structural Timber under Varying Humidity Conditions, ST Sept. 94, p2565-2582

Matteo, John
Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, with George Deodatis and David P. Billington, ST Nov. 94, p3197-3211

Mau, S. T.
Story-Drift Shear and OTM Estimation from Building Seismic Records, with V. Aruna, ST Nov. 94, p3366-3385
see Durrani, Ahmad J., ST Mar. 94, p947-964

McGuire, William
see Attalla, Mourad R., ST Aug. 94, p2451-2473

Mehrain, Mehrdad
see Kunnath, Sashi K., ST Jan. 94, p120-138

Melchers, R. E.
see Li, C. Q., ST Sept. 92, p2323-2337

Menken, C. M.
disc. (of Finite Element Method for Buckling Analysis of Plate Structures, by Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068), ST Oct. 94, p3093-3095

Meyer, Christian
see Paskova, Todorka, ST July 94, p2242-2247

Miller, R. A.
Destructive Testing of Decommissioned Concrete Slab Bridge, with A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198
see Shahrooz, B. M., ST Feb. 94, p422-440

Miller, Thomas H.
Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, with Teoman Pekoz, ST May 94, p1644-1650
Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, with Teoman Pekoz, ST Mar. 94, p805-823
Unstiffened Strip Approach for Perforated Wall Studs, with Teoman Pekoz, ST Feb. 94, p410-421

Mitchell, J. Bryan
see Fridley, Kenneth J., ST Dec. 94, p3567-3576

Miyamoto, Ayaho
Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, with Michael William King and Manabu Fujii, ST June 94, p1685-1702

Miyata, Toshio
see Boonyapinyo, Virote, ST Feb. 94, p486-506

Mohammadi, J.
see Hahin, C., ST Jan. 93, p150-168

Mola, Franco
disc. (of Simplified Creep Analysis of Composite Beams with Flexible Connectors, by Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497), ST Oct. 94, p3083-3084

Mongi, Ahmed N. K.
see Sotiropoulos, Sotiris N., ST Feb. 94, p464-485

Mori, Yasuhiro
Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, with Bruce R. Ellingwood, ST Mar. 94, p824-845
Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, with Bruce R. Ellingwood, ST Mar. 94, p846-862

Moses, Fred
Applications of Field Testing to Bridge Evaluation, with Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762

Mourlog, Sarah E.
Guidelines to Minimize Floor Vibrations from Building Occupants, with Bruce R. Ellingwood, ST Feb. 94, p507-526

Mufti, Aftab A.
Moments in Deck Slabs Due to Cantilever Loads, with Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777
disc: R. Premachandran and Y. Tachibana, ST Oct. 94, p3085-3086
clo: ST Oct. 94, p3086-3088
see Newhook, John P., (disc), ST Jan. 93, p88-107

Muller, John F.
Fatigue of Prestressed Concrete Beams with Inclined Strands, with Peter F. Dux, ST Apr. 94, p1122-1139

Munshi, Javeed A.
see Kasai, Kazuhiko, (disc), ST Apr. 93, p1222-1233

Murtha-Smith, Erling
Compression-Member Models for Space Trusses: Review, ST Aug. 94, p2399-2407
Nonlinear Analysis of Space Trusses, ST Sept. 94, p2717-2736

Murthy, D. S. Ramachandra
Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, with A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010

Naganuma, Futamia
see Kuranishi, Shigeru, ST July 94, p1977-1990

Nagpal, A. K.
see Singh, Y., ST Nov. 94, p3105-3121

Nakashima, Masayoshi
Variation of Ductility Capacity of Steel Beam-Columns, ST July 94, p1941-1960

Nakazawa, Masatoshi
see Kuranishi, Shigeru, ST July 94, p1977-1990

Namini, Ahmad
Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, with Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526
disc: Z. Q. Chen and T. J. A. Agar, ST Mar. 94, p1044-1045
clo: ST Mar. 94, p1046

Narayne, Krishna
Stress-Strain Curves for Brick Masonry in Biaxial Compression, with Sachchidanand Sinha, ST June 92, p1451-1461
disc: Manicka Dhanasekar and Adrian Page, ST Mar. 94, p1048-1049
clo: ST Mar. 94, p1049

Narasimham, S. V.
disc. (of Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, by Shih Toh Chang, ST Nov. 92, p3113-3121), ST May 94, p1681

Nawy, Edward G.
see Chen, Benxian, ST Dec. 94, p3456-3470

Nayak, G. C.
see Kumar, Ram, ST Apr. 94, p1053-1074

Nemir, David C.
Semiactive Motion Control Using Variable Stiffness, with Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306

Newhook, John P.
disc. (of Nonlinear Finite Element Analysis of RC Slab Bridge, by Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107) with Aftab A. Mufti, ST Oct. 94, p3078-3081

Norville, H. Scott
Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, with Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901
disc: W. Lynn Beason, ST Oct. 94, p3075-3077

Oehlers, Deric J.
Flexural Strength of Profiled Beams, with Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393

Oehlers, Deric John
Reinforced Concrete Beams with Plates Glued to Their Soffits, ST Aug. 92, p2023-2038
disc: Gilbert H. Béguin, ST Apr. 94, p1368-1369
clo: ST Apr. 94, p1369-1372
Shear Connection in Haunched Composite Beams with Sloping Sides, with Sung Moo Park, ST July 94, p2227-2232

Oh, Byung Hwan
Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, ST Oct. 92, p2821-2836
disc: Bernard Espion, ST June 94, p1932-1934
clo: ST June 94, p1934

Okada, T.
see Sakumoto, Y., ST Apr. 94, p1103-1121

Olorunniwo, A.
see Alwis, W. A. M., ST July 94, p2220-2226

Oreta, Andres W. C.
Element Identification of Member Properties of Framed Structures, with Tada-aki Tanabe, ST July 94, p1961-1976

O'Rourke, Michael J.
Roof-Snow Load for Seismic-Design Calculations, with Robert S. Speck, Jr., ST Sept. 92, p2338-2350
disc: John Webster Brown, ST Jan. 94, p309-312
clo: ST Jan. 94, p312

Osegueda, Roberto A.
see Nemin, David C., ST Apr. 94, p1291-1306

Ouyang, Chengsheng
see Tang, Tianxi, ST Nov. 92, p3169-3185

Ožbolt, Joško
see Bažant, Zdeněk P., ST Aug. 94, p2377-2398

Paboojian, Shannon D.
see Ricles, James M., ST Aug. 94, p2474-2494

Packer, Jeffrey A.
see van Wingerde, Arno M., (disc), ST Feb. 93, p654-661

Page, Adrian
see Dhanasekar, Manicka, (disc), ST June 92, p1451-1461

Palani, G. S.
Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, with Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062
err: ST Nov. 92, p3250-3251
disc: Yeong-Bin Yang and Shyh-Rong Kuo, ST Feb. 94, p671-673
clo: ST Feb. 94, p673-674

Park, R.
see Restrepo-Posada, J. I., ST Nov. 94, p3178-3196
see Watson, S., ST June 94, p1798-1824
see Watson, S., ST June 94, p1825-1849

Park, Sung Moo
see Oehlers, Deric John, ST July 94, p2227-2232

Paskova, Todorka
Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, with Christian Meyer, ST July 94, p2242-2247

Paul, Joop C.
Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, with Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870

Paultre, Patrick
see Cusson, Daniel, ST Mar. 94, p783-804

Peabody, A. B.
Buckling Strength of Wood Power Poles Using Finite Elements, with J. W. Wekezer, ST June 94, p1893-1908

Pekoz, Teoman
see Miller, Thomas H., ST Feb. 94, p410-421
see Miller, Thomas H., ST Mar. 94, p805-823
see Miller, Thomas H., ST May 94, p1644-1650

Pellicane, Patrick J.
see Gutkowski, Richard M., ST Dec. 94, p3435-3455

Peyrot, A. H.
see Kitipornchai, S., ST Aug. 94, p2281-2287

Pi, Yong Lin
Inelastic Bending and Torsion of Steel I-Beams, with N. S. Trahair, ST Dec. 94, p3397-3417
Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, with N. S. Trahair, ST July 94, p2041-2061
Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, with N. S. Trahair, ST July 94, p2062-2085

Pilakoutas, Kypros
disc. (of Finite Element Modeling of Concrete Expansion and Confinement, by F. J. Vecchio, ST Sept. 92, p2390-2406), ST Jan. 94, p308-309

Plevris, Nikolaos
Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, with Thanasis C. Triantafillou, ST Mar. 94, p1016-1042
err: ST June 94, p1940

Polepeddi, R. K.
see Hahin, C., ST Jan. 93, p150-168

Popov, Egor P.
see Ricles, James M., ST Feb. 94, p441-463

Porter, Max L.
see Easterling, W. Samuel, ST Feb. 94, p560-576
see Easterling, W. Samuel, ST Feb. 94, p577-596

Premachandran, R.
disc. (of Moments in Deck Slabs Due to Cantilever Loads, by Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777) with Y. Tachibana, ST Oct. 94, p3085-3086

Priestley, M. J. N.
see Chai, Y.H., ST Aug. 94, p2358-2376
see Seible, F., ST Mar. 94, p925-946

Priestley, M. J. Nigel
Seismic Shear Strength of Reinforced Concrete Columns, with Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329

Prokić, A.
Material Nonlinear Analysis of Thin-Walled Beams, ST Oct. 94, p2840-2852

Pyles, Marvin R.
see Charland, James W., ST Dec. 94, p3649-3665

Rahman, M. Ayubur
Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, with Subhash C. Anand, ST Aug. 94, p2408-2422
see Anand, Subhash C., ST Mar. 94, p998-1015

Rajasekaran, Sundaramoorthy
see Palani, G. S., ST Aug. 92, p2039-2062

Ramasamudra, Manjunatha
see Vallabhan, C. V. Girija, ST May 94, p1663-1671

Rao, A. G. Madhava
see Murthy, D. S. Ramachandra, ST July 94, p1991-2010

Rao, A. S. Prasada
Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, with R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792

Rasoof, Mohammed
disc. (of Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, by Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031), ST Aug. 94, p2548-2550

Rauch, Alan F.
Behavior of Deeply Corrugated Steel Plate in Culvert, with Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655

Reich, Ronald W.
see Dewey, Raymond R., ST Oct. 94, p3025-3044

Restrepo-Posada, J. I.
Variables Affecting Cyclic Behavior of Reinforcing Steel, with L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196

Ricles, James M.
Grout Repair of Dented Offshore Tubular Bracing—Experimental Behavior, with Troy E. Gillum and William Lamport, ST July 94, p2086-2107
Inelastic Link Element for EBF Seismic Analysis, with Egor P. Popov, ST Feb. 94, p441-463
Seismic Performance of Steel-Encased Composite Columns, with Shannon D. Paboojian, ST Aug. 94, p2474-2494

Roberts, Kathy A.
see Fridley, Kenneth J., ST Dec. 94, p3567-3576

Roman, Mauricio
see Thewalt, Chris, ST Sept. 94, p2768-2781

Rongh, Hamid Reza
Parameters Affecting Distortional Buckling of Tapered Steel Members, with Mark Andrew Bradford, ST Nov. 94, p3137-3155

Rosowsky, David V.
Calibration of Current Factors in LRFD for Steel, with Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746

Ruiz, Sonia E.
Reliability of Short and Slender Reinforced-Concrete Columns, with J. Cipriano Aguilar, ST June 94, p1850-1865

Rule, William Keith
Automatic Truss Design by Optimized Growth, ST Oct. 94, p3063-3070

Russo, Edwin P.
Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, with Gregory Garic, ST Nov. 92, p3243-3249
disc: Victor H. Cortinez, ST Feb. 94, p676-678

Saathoff, Patrick
see Stathopoulos, Theodore, ST Aug. 94, p2495-2519

Saether, Kolbjorn
Flat Plates with Regular and Irregular Column Layouts.I: Analysis, ST May 94, p1563-1579
Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, ST May 94, p1580-1598

Şafak, Erdal
Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, with Arthur Frankel, ST Oct. 94, p2820-2839

Salidi, M.
Behavior of Graphite/Epoxy Concrete Composite Beams, with F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976
Prestress Force Effect on Vibration Frequency of Concrete Bridges, with B. Douglas and S. Feng, ST July 94, p2233-2241

Saito, H.
see Sakumoto, Y., ST Apr. 94, p1103-1121

Saka, Toshitsugu
Buckling Behavior of Square-and-Diagonal Double-Layer Grid, with Yoshiya Taniguchi, ST Apr. 94, p1088-1102

Sakumoto, Y.
Fire Resistance of Fire-Resistant Steel Columns, with T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121

Sameer, Sajjad U.
Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, with Sudhir K. Jain, ST May 94, p1375-1394

Samman, Mahmod M.
Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, with Mrinmay Biswas, ST Jan. 94, p269-289
Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, with Mrinmay Biswas, ST Jan. 94, p290-306

Santhakumar, A. R.
see Murthy, D. S. Ramachandra, ST July 94, p1991-2010

Saouma, Victor E.
see Dewey, Raymond R., ST Oct. 94, p3025-3044

Sargand, Shad M.
see Rauch, Alan F., ST May 94, p1651-1655

Seible, F.
Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, with M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946
Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, with G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924
see Chai, Y.H., ST Aug. 94, p2358-2376

Sen, Rajan
Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, with Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667
Static Response of Fiberglass Pretensioned Beams, with Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268
see Issa, Mohsen, ST Dec. 94, p3634-3648

Shah, Surendra P.
see Tang, Tianxi, ST Nov. 92, p3169-3185

Shahawy, Mohsen
see Issa, Mohsen, ST Dec. 94, p3634-3648
see Sen, Rajan, ST Jan. 94, p252-268
see Wang, Ton-Lo, ST Mar. 94, p885-902

Shahrooz, B. M.
Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, with I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440
see Miller, R. A., ST July 94, p2176-2198

Shekar, Y.
see Azizinamini, A., ST Nov. 94, p3284-3304
see Azizinamini, A., ST Nov. 94, p3305-3319

Sherbourne, A. N.
see Bedair, O. K., (disc), ST May 93, p1358-1373

Sherbourne, Archibald N.
3D Simulation of EndPlate Bolted Connections, with Mohammed R. Bahaari, ST Nov. 94, p3122-3136

Sheridan, Darrel L.
see Norville, H. Scott, ST Mar. 93, p891-901

Shing, P. Benson
see Lotfi, Hamid R., ST Jan. 94, p63-80

Siddharthan, Raj
Investigation of Performance of Bridge Abutments in Seismic Regions, with Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346

Singh, Y.
Negative Shear Lag in Framed-Tube Buildings, with A. K. Nagpal, ST Nov. 94, p3105-3121

Singhal, Avinash C.
Simulation of Blast Pressures on Flexible Panels, with Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020

Sinha, Sachchidanand
see Naraine, Krishna, ST June 92, p1451-1461

Smyrell, A. Gordon
Approximate Formulas for Effective Length of Steel Columns, ST Sept. 94, p2793-2801

Sobanjo, J. O.
Evaluation of Projects for Rehabilitation of Highway Bridges, with George Stukhart and Ray W. James, ST Jan. 94, p81-99

Soh, Ai-Kah
Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, with Chee-Kiong Soh, ST Feb. 93, p654-661
disc: Arno M. van Wingerde, Jeffrey A. Packer and Jaap Wardenier, ST July 94, p2257-2259
clo: ST July 94, p2260

Soh, Chee-Kiong
see Soh, Ai-Kah, ST Feb. 93, p654-661

Soltis, Lawrence A.
see Winistorfer, Steve G., ST Dec. 94, p3577-3594

Sotiropoulos, Sotiris N.
Theoretical and Experimental Evaluation of FRP Components and Systems, with Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485

South, J. M.
see Hahin, C., ST Jan. 93, p150-168

Speck, Robert S., Jr.
see O'Rourke, Michael J., ST Sept. 92, p2338-2350

Sriram, D.
see Agbayani, N., ST Dec. 93, p3630-3648

Stathopoulos, Theodore
Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, with Patrick Saathoff, ST Aug. 94, p2495-2519

Steffen, P.
see Anderheggen, E., ST June 94, p1718-1731

Stewart, D. A.
see Banon, H., ST Dec. 94, p3595-3612

Stojadinović, B.
see Thewalt, C. R., ST Oct. 94, p3012-3024

Stone, William C.
ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, with Andrew W. Taylor, ST Dec. 94, p3548-3566

Stukhart, George
see Sobanjo, J. O., ST Jan. 94, p81-99

Su, Xiaozu
Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, with Bolong Zhu, ST June 94, p1732-1744

Sucuoğlu, Haluk
Resistance Mechanisms in RC Building Frames Subjected to Column Failure, with Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782

Sun, Bao-Jun
Design Aids for Reinforced Concrete Columns, with Zhi-Tao Lu, ST Nov. 92, p2986-2995
disc: Juan Carlos Molano Toro, ST Feb. 94, p678-679

Sun, Xianghong
see Sen, Rajan, ST Feb. 94, p651-667

Sun, Zeying
see Sen, Rajan, ST Jan. 94, p252-268

Surana, C. S.
see Chatterjee, P. K., ST Mar. 94, p681-703

Sweeney, R. A. P.
disc. (of Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, by C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168) with J. W. Fisher, ST May 94, p1674-1675

Syngellakis, Stavros
Elastic Critical Loads for Plane Frames by Transfer Matrix Method, with Esmat S. Kameshki, ST Apr. 94, p1140-1157

Tabatabai, S. M. R.
see Anderheggen, E., ST June 94, p1718-1731

Tachibana, Y.
see Premachandran, R., (disc), ST June 93, p1761-1777

Takiguchi, Katsuki
see Ichinose, Toshikatsu, ST Aug. 94, p2261-2280

Tan, Kang-Hai
see Fung, Tat-Ching, ST Oct. 94, p3046-3055

Tanabe, Tada-aki
see Oreta, Andres W. C., ST July 94, p1961-1976

Tang, Tianxi
Fracture Mechanics and Size Effect of Concrete in Tension, with Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185
disc: Zdeněk P. Bažant, ST Aug. 94, p2555-2558
disc: Mohammad T. Kazemi and Zdeněk P. Bažant, ST Aug. 94, p2558-2559
clo: ST Aug. 94, p2559-2562

Tang, Yu
Computing Response of Tanks with Two Liquids, ST Dec. 94, p3668-3674

Taniguchi, Yoshiya
see Saka, Toshitsugu, ST Apr. 94, p1088-1102

Tarantino, Angelo Marcello
Creep Effects in Composite Beams with Flexible Shear Connectors, with Luigino Dezi, ST Aug. 92, p2063-2081
disc: Zdeněk P. Bažant, ST Feb. 94, p674-675
clo: ST Feb. 94, p675-676
see Dezi, Luigino, ST May 93, p1484-1497
see Dezi, Luigino, ST July 93, p2112-2133

Tasaka, S.
see Sakumoto, Y., ST Apr. 94, p1103-1121

Taylor, Andrew W.
see Stone, William C., ST Dec. 94, p3548-3566

Teng, Jin-Guang
Plastic Collapse at Lap Joints in Pressurised Cylinders under Axial Load, ST Jan. 94, p23-45

Thewalt, C. R.
Stable Reinforced-Concrete Section-Analysis Procedure, with B. Stojadinović, ST Oct. 94, p3012-3024

Thewalt, Chris
Performance Parameters for Pseudodynamic Tests, with Mauricio Roman, ST Sept. 94, p2768-2781

Tiedeman, Jane L.
Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, with Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250
disc: Alex Aswad, ST June 94, p1938-1939

Tomaževič, Miha
Seismic Behavior of Plain- and Reinforced-Masonry Buildings, with Polona Weiss, ST Feb. 94, p323-338

Toro, Juan Carlos Molano
disc. (of Design Aids for Reinforced Concrete Columns, by Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995), ST Feb. 94, p678-679

Trahair, N. S.
see Pi, Yong Lin, ST July 94, p2041-2061
see Pi, Yong Lin, ST July 94, p2062-2085
see Pi, Yong Lin, ST Dec. 94, p3397-3417

Triantafillou, Thanasis C.
see Plevris, Nikolaos, ST Mar. 94, p1016-1042

Tsai, C. S.
Applications of Viscoelastic Dampers to High-Rise Buildings, with H. H. Lee, ST Apr. 93, p1222-1233
disc: Kazuhiko Kasai and Javeed A. Munshi, ST Dec. 94, p3680-3683
clo: ST Dec. 94, p3683-3687
Temperature Effect of Viscoelastic Dampers during Earthquakes, ST Feb. 94, p394-409

Tunomoto, Meguru
see Kawashima, Kazuhiko, ST Apr. 93, p1015-1031

Uang, Chia-Ming
Deflection Amplification Factor for Seismic Design Provisions, with Ahmed Maarouf, ST Aug. 94, p2423-2436

Unjoh, Shigeki
see Kawashima, Kazuhiko, ST Apr. 93, p1015-1031
see Kawashima, Kazuhiko, ST Sept. 94, p2583-2601

Usami, Tsutomu
Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, with Hanbin Ge, ST July 94, p2021-2040
Effective Width of Locally Buckled Plates in Compression and Bending, ST May 93, p1358-1373
disc: O. K. Bedair and A. N. Sherbourne, ST Oct. 94, p3088-3091
clo: ST Oct. 94, p3091-3093

Usuki, Tsuneo
Rotational Centers of Plates Regulating Distortion of Box Girders, ST Sept. 94, p2602-2622

Vallabhan, C. V. Girija
Parametric Study of Axisymmetric Circular-Glass Plates, with Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671

van der Veen, C.
see Shahrooz, B. M., ST Feb. 94, p422-440

van Wingerde, Arno M.
disc. (of Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, by Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661) with Jeffrey A. Packer and Jaap Wardenier, ST July 94, p2257-2259

Vecchio, F. J.
Compression Response of Cracked Reinforced Concrete, with M. P. Collins, ST Dec. 93, p3590-3610
err: ST May 94, p1683
Finite Element Modeling of Concrete Expansion and Confinement, ST Sept. 92, p2390-2406
disc: Kypros Pilakoutas, ST Jan. 94, p308-309
clo: ST Jan. 94, p309

Veletsos, A. S.
see Malhotra, P. K., ST Dec. 94, p3471-3488
see Malhotra, P. K., ST Dec. 94, p3489-3505
see Malhotra, P. K., ST Dec. 94, p3525-3547

Verma, Ravindra
see Priestley, M. J. Nigel, ST Aug. 94, p2310-2329

Veshosky, David
Comparative Analysis of Bridge Superstructure Deterioration, with Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136

Vimalanandam, V.
see Rao, A. S. Prasada, ST Sept. 94, p2784-2792

Walker, David
see Bruneau, Michel, ST Sept. 94, p2637-2652

Wallace, John W.
New Methodology for Seismic Design of RC Shear Walls, ST Mar. 94, p863-884

Walraven, Joost
Rough Cracks Subjected to Earthquake Loading, ST May 94, p1510-1524

Wang, C. M.
Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, with L. Wang and K. K. Ang, ST Jan. 94, p200-211

Wang, L.
see Wang, C. M., ST Jan. 94, p200-211

Wang, Ton-Lo
Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, with Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902

Wardenier, Jaap
see van Wingerde, Arno M., (disc), ST Feb. 93, p654-661

Watson, S.
Confining Reinforcement for Concrete Columns, with F. A. Zahn and R. Park, ST June 94, p1798-1824
Simulated Seismic Load Tests on Reinforced Concrete Columns, with R. Park, ST June 94, p1825-1849

Wehbe, N.
see Saiidi, M., ST Oct. 94, p2958-2976

Weiss, Polona
see Tomaževič, Miha, ST Feb. 94, p323-338

Wekezer, J. W.
see Peabody, A. B., ST June 94, p1893-1908

Wheat, Dan L.
Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, with Jose M. Calixto, ST June 94, p1909-1929

White, D. W.
see Liew, J. Y. Richard, ST May 94, p1434-1454

Winistorfer, Steve G.
Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, with Lawrence A. Soltis, ST Dec. 94, p3577-3594

Wium, Jan A.
Simplified Calculation Method for Force Transfer in Composite Columns, with Jean-Paul Lebet, ST Mar. 94, p728-746

Won, Y. H.
see Fafitis, A., ST Apr. 94, p1202-1220

Wright, Howard D.
see Oehlers, Deric J., ST Feb. 94, p378-393

Xiao, Yan
see Priestley, M. J. Nigel, ST Aug. 94, p2310-2329

Xu, Y. L.
Semianalytical Method for Parametric Study of Tuned Mass Dampers, with K. C. S. Kwok, ST Mar. 94, p747-764

Yam, Michael C. H.
see Cheng, J. J. Roger, ST Feb. 94, p538-559

Yamada, Hitoshi
see Boonyapinyo, Virote, ST Feb. 94, p486-506

Yamaguchi, T.
see Sakumoto, Y., ST Apr. 94, p1103-1121

Yang, Henry T. Y.
see Chang, C. C., ST Apr. 94, p1307-1326

Yang, Lin
Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, ST Sept. 94, p2675-2696

Yang, Yeong-Bin
disc. (of Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, by G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062) with Shyh-Rong Kuo, ST Feb. 94, p671-673

Yao, Felix
see Adebar, Perry, ST July 94, p2108-2122

Yau, C. Y.
Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, with S. L. Chan, ST Oct. 94, p2803-2819

Yong, Yook-Kong
Behavior of Reinforced High-Strength–Concrete Corbels, with P. Balaguru, ST Apr. 94, p1182-1201

Yoshida, M.
see Sakumoto, Y., ST Apr. 94, p1103-1121

Yura, Joseph A.
disc. (of Column Design in Steel Frames under Gravity Loads, by Oscar de Buen, ST Oct. 92, p2928-2935), ST Mar. 94, p1051-1052

Zahn, F. A.
see Watson, S., ST June 94, p1798-1824

Zhao, Zhengwei
Fatigue-Reliability Evaluation of Steel Bridges, with Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623
Fatigue-Reliability Updating Through Inspections of Steel Bridges, with Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642

Zhou, Zhi Hua
see Chan, Siu Lai, ST June 94, p1703-1717

Zhu, Bolong
see Su, Xiaozu, ST June 94, p1732-1744